



THOMAS G. NEWMAN,
EDITOR.

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Editorial Buzzings.

The Rev. Stephen Reese, of Maiden Rock, Wis., has been "on the sick list" ever since January. *La Grippe* is the cause.

There Will be No State Fair in Illinois in 1893, on account of the World's Columbian Fair, to be held in that year at Chicago.

The Agricultural Society of Illinois has made a request for an appropriation by the Legislature of a million dollars for a suitable building at the World's Columbian Fair, and its management and care from the opening until its closing in 1893.

The Editor of the AMERICAN BEE JOURNAL was, last week, unanimously made the first "honorary member" of the Illinois State Bee-Keepers' Association. This marked distinction is appreciated. We cannot undertake to do as much active work as formerly, but will do what we can for the furtherance of organized efforts generally.

The Wisconsin State Bee-Keepers' Association, after we left the Convention at Madison, made us an "honorary member" of that Society. We appreciate the honor, and wish the Society continued prosperity. It contains many wide-awake and well-posted apiarists.

The "Cold Snap," which commenced the day before the Springfield Convention, prevented many from attending, who otherwise would have been there. Among these we may mention Mrs. L. Harrison, the apiarist and noble woman of Peoria. We missed her wise counsel, her hearty grasp of hand and words of welcome, as well as her cheery smile and friendly advice.

The Bee-World has added a cover to its second number, and dates it "March"—no February number having been published on account of the late start in January, and the present enlargement to 20 pages.

Pages of Pictures of the Indian war, and the late Gen. Sherman's obsequies at St. Louis, are given in this week's issue of "Frank Leslie's Illustrated Newspaper."

The Illinois State Bee-Keepers' Association decided to ask the Legislature to appropriate \$5,000 for the collection and maintenance of a suitable exhibit of bees, honey, wax and apiarian appliances at the World's Columbian Fair. The committee to form the bill, and present its claims consists of the following:

Thomas G. Newman, Chicago.
Col. Charles F. Mills, Springfield.
Hon. J. M. Hambaugh, Spring.
Hon. John S. Lyman, Farmingdale.
C. P. Dadant, Hamilton.
A. N. Draper, Upper Alton.
S. N. Black, Clayton.

All other States should take similar action at once, so as to secure the appropriations in good time to command magnificent exhibits.

An Alliance of the different societies in each State, which are interested in agricultural pursuits is very desirable. Some States already have such in working order. Among these we may mention Indiana, Wisconsin, Iowa, Nebraska and Kansas. It is now in order to form such in Illinois and other States.

At the Convention in Springfield last week, Col. Charles F. Mills, Secretary of the State Board of Agriculture (who is also an apiarist and member of the State Bee-Keepers' Association), spoke at some length upon the desirability of forming such an Alliance, and presented some strong arguments in favor of its existence. He said that such an organization is now being formed here, under the name of "The Illinois Farmers' Club," and he wanted the bee-keepers to join and make a part of it. He also dwelt upon the advisability of a Farmers' Club, inasmuch as it was necessary that all branches of agricultural pursuits should be governed by meetings held by this Club. He also recommended the holding of joint sessions with the Agricultural and Horticultural Associations, whereby the views of each might be more satisfactorily and clearly defined.

At the conclusion of Col. Mills' address, we fully endorsed the project, and said it was something that we had long needed.

In Indiana, the State fosters all the agricultural pursuits, helps the State Societies to hold annual meetings, and publishes their reports in full.

Reduced railroad rates can always be obtained, and one journey is sufficient for those who are interested in several branches of agriculture, to attend all the meetings, as they are all held in one week at the Capitol, but on different days.

In the afternoon, the following preamble and resolutions were adopted, fully committing the Illinois State Bee-Keepers' Association to the project:

WHEREAS, The Agricultural Associations have been in favor of a movement looking to the organization of an association to be known as the "Illinois

Farmers' Club," and composed of the live-stock and other associations of the State, and having for its object annual meetings for the promotion of the various industries represented; and

WHEREAS, The interests of all engaged in farming pursuits can be greatly promoted by such annual gatherings, held for the purpose of discussing all matters relating to agriculture; therefore, be it

Resolved, That the Illinois Bee-Keepers' Association hereby agree to co-operate with the agricultural organizations of the State, in holding a series of meetings in the month of December, 1891, at Springfield.

Resolved, That it is the sense of this Association that arrangements be made for holding the meetings of the respective organizations, composing the Illinois Farmers' Club, in the day time, and the mass-meetings, composed of all of the members of the several societies, be held in the evening, in the Hall of Representatives in the Capitol Building, during the continuance of the session of the Illinois Farmers' Club.

Thus it will be seen that the State Society and the Farmers' Club are the result of some work done last week at the Capital. We hope that the good effects of these organizations will be felt, as the years roll by.

The Farmers and bee-keepers of Newaygo county, Mich., have formed a very pleasant Alliance. This is as it should be, for their interests are identical, and their relations should always be harmonious. The following, from friend Hilton, comes just as we are closing the forms for this week:

The Newaygo County Farmers and Bee-Keepers have just closed their fifth annual Institute, with 58 members. It was so full of interest that we could not complete our programme. In point of numbers, I think we excel any other State Association.

GEO. E. HILTON, Sec.

An Improvement, Sure.

THE AMERICAN BEE JOURNAL looks better than ever in its new dress. We had thought it as formerly, to be the "acme of perfection," but this new form and dress is an improvement, sure, and it comes regularly to its subscribers once a week.—*Rays of Light*.

Spraying Grapes.—At the late meeting of the Ohio Horticultural Society, President Campbell read an essay on new grapes. Following this, was an essay by Mr. Geo. W. High, a successful grape grower on the spraying of vines, to prevent mildew or rot, applying it just after blossoming, or when fruit is set, and two or three times more between then and the ripening of the grapes. The mixture consists of one pound of sulphate of copper, dissolved in three gallons of hot water, and, when cold, add one pint of the spirits of ammonia, then 22 to 25 gallons of water. He uses the Nixon spraying machine for the work.

Prof. Weed, of the Ohio Experimental Station, at Columbus, also recommended the spraying of fruit and other trees, with highly-diluted poisoned water (4 ounces of London purple or Paris green, to 50 gallons of water), for the destruction of insects injurious to fruit or foliage. He found it efficacious in the destruction (or driving away) of the curculio, as well as killing, without doubt, the codling moth, canker worm, and caterpillars.

Let it be remembered, however, that the spraying must not be done while in bloom, or it will be very harmful to the bees or other insects, while they are fertilizing the flowers, and thus increasing the quantity and quality of fruit.

We Acknowledge a call from Mr. D. A. Fuller, the efficient Secretary of the Northern Illinois Bee-Keepers' Association. Mr. F. fully intended to be present at Springfield last week, but a sick wife prevented. Mr. F. is a brother to the Chairman of one of the Steering Committees of the Legislature, and the latter will aid our State Association to obtain the necessary appropriation for the Columbian Fair. Mr. D. A. Fuller has two more acquaintances in the Legislature, upon whom we can count for aid—making five in all, as a nucleus to sustain our claim for a respectable appropriation in order to make a grand exhibit at the World's Columbian Fair.

The Christian Woman, of Philadelphia, is an excellent home paper, and well deserves the patronage of all who desire to elevate the moral and intellectual standard of the human race. In its last issue we notice the following for which we make our best bow:

The AMERICAN BEE JOURNAL for 1891 is improved in size, enlarged in the number of its pages, and is stored with information as good as the best honey, the cultivation of which its industrious editor is zealous to secure. No one can read this standard journal (the oldest publication of its kind) and not wish he could keep a colony of bees. But whoever tries to carry wishes into effect must make up his mind to be as industrious and persevering as the bees are.

The employment is carried on successfully by women, and in many cases with great enthusiasm and delight. The reader will be surprised to see how large, important and increasing the honey-producing industry is. When we find apiarists talking of car-loads and tons of honey, we must try to comprehend millions of bees, miles and square miles of hives, and vast areas of flowers.

Locomotives will jump the tracks, ocean-racers will collide, live electric wires will kill the handlers, and bees will sting; but all can be managed, and all will pay. The BEE JOURNAL tells how the management in its specialty can be secured.

Among the Telegraphic News in the daily papers, last Friday, we found the following item, in the list of corporations licensed at Springfield, on Feb. 27, 1891, to commence business under the laws of the State of Illinois:

The Illinois State Bee-Keepers' Association, at Springfield; to promote bee-culture; without capital stock; incorporators, P. J. England, J. A. Stone and A. N. Draper.

We drew up the incorporation papers before leaving the Convention hall, and this shows that the incorporators attended to the business; and the State Association is now born, and fully recognized by law.

Clubs of 5 New Subscriptions for \$4.00, to any addresses. Ten for \$7.50.

Wavelets of News.

The Live-Stock Men met in Springfield last Thursday, and resolutions were adopted asking the Legislature to appropriate \$50,000 to be awarded in cash prizes for live-stock owned in Illinois and exhibited at the World's Columbian Exposition.

A bill was approved, and will be presented to the General Assembly, providing for at least the amount named, and that the State Board of Agriculture be instructed to apportion the prizes on the basis of 42 per cent. to breeding rings for horses, 25 per cent. to breeding rings for cattle, 15 per cent. for swine, 12 per cent. for sheep, and 6 per cent. for the standard varieties of poultry and pet stock.

A committee, of which the Hon. D. W. Smith, of Springfield, is chairman, was appointed to assist in securing the passage of the bill.

As the bees are not included in the above enumeration and apportionment, we must get our request for an appropriation for bees and honey in separately, or go without.

Seasonable Hints.

Bees have not flown here in Central New York since Nov. 10, or during a period of about 95 days. As bees are natives of warm climates, where they can fly quite often, so as to avoid their excitement, this confinement is beginning to tell on them; some colonies are spotting their combs. If a chance to fly and empty themselves does not occur soon, diarrhea and loss will be the result.

Owing to the poor honey season of the year 1890, many colonies went into winter quarters light in stores, and on this account, it is well to look to them a little, to see that they do not starve. As long as sealed stores are seen in the combs, which the bees are clustered upon, they are all right. If none are seen, they should be fed, so as to make sure that they do not starve in some cold spell of weather when they cannot move about to get the few cells of honey which

may be scattered about the hive, near the sides and elsewhere.

To best feed bees at this time of the year, set in some frames of sealed honey on any warm day when the bees can fly, or if such a day does not occur, remove a frame that has no honey in it, which is next to the cluster, and place one of the frames of sealed honey up against the bees. If no frames of honey are at hand, place some sections of honey over the cluster in such a way that they can cluster upon them, and thus lengthen out the limited supplies which they may have. If no honey of any kind is at hand, make a thick syrup of granulated sugar, and pour it into a comb while slightly warm, and set this comb of syrup in the hive the same as you would a frame of sealed honey. Another good way to feed at this time of year is to mix pulverized sugar and honey together, having both warm, and kneading in so much of the sugar that a stiff loaf is formed, similar to a loaf of bread before baking, when this loaf is to be laid on the frames immediately over the cluster of bees, on which the bees will subsist until warm weather.

—G. M. DOOLITTLE, in *Rural Home*.

Bees and Honey.

This book of 192 pages is not only a practical, exhaustive guide for those who handle bees, but it is full of interest and information for the general reader, especially the young. There are 237 illustrations. The author is Thomas G. Newman, editor of the *AMERICAN BEE JOURNAL*, Chicago, Ills.—*Children's Era*.

Catalogues and Price-Lists for 1891 have been received from

Joseph E. Shaver, Friedens, Va.—40 pages—Supplies for Bee-Keepers.

G. K. Hubbard, Fort Wayne, Ind.—16 pages—Bee-Hives, Section Press, etc.

Thomas S. Wallace, Clayton, Ills.—6 pages—Bees and Queens.

Roe & Kirkpatrick, Union City, Ind.—8 pages—Apiarian Supplies.

J. B. Kline, Topeka, Kans.—24 pages—Supplies for Bee-Keepers.

A Nice Pocket Dictionary will be given as a premium for only **one new** subscriber to this *JOURNAL*, with \$1.00. It is a splendid little Dictionary—just right for the pocket. Price, **25 cents**.

Queries and Replies.

When Dividing, Where to Find the Queen.

QUERY 755.—In dividing a colony, in which position may I expect to find the queen, if I want to clip her wings?—Minnesota.

Let some one else answer this.—MRS. L. HARRISON.

I do not understand the question.—J. M. HAMBAUGH.

I do not understand this question.—EUGENE SECOR.

Anywhere among the workers in the brood-nest.—C. C. MILLER.

Crawling on the combs, in the suspended-frame hives.—JAMES HEDDON.

You will want experience to guide you, in such work.—H. D. CUTTING.

You may find her on one of the outside combs containing eggs, or any one between.—M. MAHIN.

You will generally find the queen on the central combs, where she will be laying.—DADANT & SON.

In a standing or walking position. Possibly she may be found in a laying position.—A. B. MASON.

I do not understand the question. I would say, "Keep on the look" until you find her.—J. P. H. BROWN.

The queen should be found in making the division; then it will be known in which part she is.—G. L. TINKER.

She will generally be found on the brood, unless from fright she runs beyond it, and most likely towards the center of the brood circle.—R. L. TAYLOR.

As far as I know, you will always find a queen standing on her feet, if she is good for anything. If that is not what you mean by "position," try to frame your question so that we can understand what you do mean.—G. M. DOOLITTLE.

I do not understand this question. I find queens in all positions that they can take crawling; and to clip, it makes no difference what position she is in, for if the position she is found in does not suit, it can easily be changed. Be careful to clip her wing only.—J. E. POND.

That depends very much on what preparation you have given the bees be-

fore opening the hive. If but little smoke has been used, and no drumming, you will likely find the queen quietly attending to her business on some of the center combs. If the hive was thoroughly stirred up, she will usually be found hiding in some corner, or up in the section-cases, if no queen-excluders are used.—C. H. DIBERN.

Your query is too indefinite to be answered to your satisfaction. When you look for the queen—if the colony has not been disturbed beforehand—the queen will be found on one of the combs containing brood or eggs. This is as near as the "position" of her whereabouts can be given. When I divide a colony I first hunt up the queen, and when she is found, I remove the comb she is on to a comb box. I then proceed to divide the colony, giving the queen to that part of the division that is moved to a new location, or you may give her to the one that occupies the old stand.—G. W. DEMAREE.

This query evidently should read differently. The word "position" ought to be *portion* or *part* of the divided colony, in order to make sense. We have tried to find the original copy, but have not been able to do so, as we do not now remember the *name* of the party sending it, and it was probably filed in our letter cases by the name of the writer.

Assuming the above to be the idea of the writer, we reply: When dividing a populous colony of bees, find the queen and put her into the new hive, placing bees and brood in the center; filling up with frames of comb foundation, removing the hive with the queen to a new location—leaving the queenless portion on the old stand, to rear for itself a queen, from the brood it possesses, if it has not already queen-cells in some stage of development. Then, of course, you "may expect to find the queen" just where you have placed her—in the new hive.—THE EDITOR.

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The "Farm-Poultry" is a 20-page monthly, published in Boston, at 50 cents per year. It is issued with a colored cover and is finely illustrated throughout.

We have arranged to club the AMERICAN BEE JOURNAL with the *Farm-Poultry* at \$1.35 per year for the two. Or with the ILLUSTRATED HOME JOURNAL at \$1.75.

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Supply Dealers should write to us for wholesale terms and cut for Hastings Perfection Feeders.

WINTER ENJOYMENTS.

What cheer is there that is half so good,
 In the snowy waste of a winter night,
 As a dancing fire of hickory wood,
 And an easy-chair in its mellow light,
 And a pearmain apple, ruddy and sleek,
 Or a jenneting with a freckled cheek?

A russet apple is fair to view,
 With a tawny tint like an autumn leaf,
 The warmth of a ripened corn-field's hue,
 Or golden hint of a harvest sheaf;
 And the wholesome breath of the finished year
 Is held in a winesap's blooming sphere.

They bring you a thought of the orchard trees,
 In blossomy April and leafy June,
 And the sleepy droning of honey-bees,
 In the lazy light of the afternoon;
 And tangled clover and bobolinks,
 Tiger-lilies and garden pinks.

If you've somewhere left, with its gables wide,
 A farm house set in the orchard old,
 You see it all in the winter-tide
 At sight of a pipplin's green-and-gold,
 Or a pearmain apple, ruddy and sleek,
 Or a jenneting with a freckled cheek.

—ST. NICHOLAS.

Topics of Interest.**Single-Walled Hives and Foul-Brood.**

DR. G. L. TINKER.

There are a number of facts bearing upon the origin and prevention of foul-brood, that, it seems to me, should be considered at this time.

It appears to me that in all cold and damp countries, like England, Canada, and the northern part of this country, foul-brood prevails with greater virulence than in southern countries, since pretty much all of the reports of the prevalence of the disease come from the northern localities. If the history of foul-brood shall prove, as now seems probable, that it prevails mostly in northern climes, then we shall be warranted in suspecting that the cool and damp Springs of northern localities, by chilling the brood of weak or insufficiently-protected colonies, may lead to the invasion and development of the disease-germs that are now thought to be the cause of the malady.

At all events, the proof now seems conclusive that foul-brood may be, in a great

many cases, traced to dead or chilled brood, in the Spring. If this shall prove to be true, the remedy of greatest concern to those bee-keepers whose apiaries are now free from the malady, is *prevention*; and that prevention will be found in proper protection and care of bees in the Spring, when most colonies are reduced in the number of bees, and brood-rearing is extended rapidly.

As a carefully protected colony will not be liable to chilled-brood, it seems to me that the first step in wiping out this disease, is to give the Spring protection, which has proved to be so advantageous to the bee-keeper in developing strong and vigorous colonies for the harvest.

If we are to have laws upon the subject, let us have one to compel bee-keepers who winter in single-walled hives in cellars, to protect their bees by suitable packing on setting them out in the Spring. Since cellar-wintered bees are not as vigorous and hardy in the Spring as those wintered out-of-doors, in protected hives, such a law would be particularly appropriate.

New Philadelphia, Ohio.

Fermentation in Honey—Trade-Mark.

G. W. DEMAREE.

The answers to Query 751, indicate that honey, in a very large portion of the country, is singularly exempt from the seeds of fermentation. Out of 18 answers, but 8 of them leave it possible to the mind that fermentation may take place in the flower cups, or in the combs, under certain conditions of weather, or electric changes. In fact, not more than 5 of the number speak sufficiently clear to indicate that they have had personal experience on the subject of the query.

I account for this in view of the fact that but few people, comparatively, are critically observant. Many persons speak of their honey as not "first-class;" "not as good as usual;" or, "the honey is bad," etc., without observing the cause of the damage. Color alone is not always a safe indication of quality, especially as pertains to the wax capping. Thoroughly cured honey, when taken into the mouth, meets the palate without the slightest shock, and is exquisitely satisfying; but honey that has caught ferment, either in the flower cups, or in its thin form, while curing in the combs, gives a "twang" to the taste that is anything but agreeable.

There is something perplexing about atmospheric causes, as pertains to the flow, as well as to the quality of honey. In the Summer of 1883, known here as the "rainy, cold Summer," nearly all the honey stored by the bees was effected with ferment, and had a disagreeable, twangy taste. Most people pronounced it "sour." The season of 1884 was warm and showery, the nectar "flowed like a river," and there never was better and more enduring honey than was produced that season. I still have a sample jar of that honey; and it is as fine in flavor and color to-day as when it run from the extractor.

In 1886 we were scorched to a crust with drouth, and the bee-pasturage had the smell of fire about it, and that season my small crop of honey was damaged by fermentation.

Last season was rainy, attended by both extremes of cold and heat, and the bees gathered nectar rapidly, and the bulk of my honey crop was first-class in every respect.

It will be seen, from the facts given above, that no uniform condition of the weather, so far as common observation can discern, is attended with uniform results as to the quality of the honey produced.

The theory is that any abnormality in the weather, that either produces abnormal growth or premature decay in vegetation, is likely to effect the quality of the nectar, and make it susceptible of excessive fermentation.

When we take into consideration the fact that all good honey must receive, from the atmosphere, sufficient of the leaven of ferment to *reduce* the raw cane sugar, as we see it in good honey, we may well be surprised that honey is not injured more frequently than it is by excessive fermentation.

An interesting experiment, made last Summer with some honey that showed the presence of ferment, both by the bead-like bubbles, when the uncapping knife had laid bare the opened cells, and by its twangy taste, throws some light on the subject, to my mind. When feeding, to have unfinished sections completed, I took occasion to have some of the fermented honey rehandled by the bees, to learn, in a practical way, what change, if any, honey undergoes by passing to and from the honey sacs of bees.

I fed back almost 50 pounds of the fermented honey, and had two cases of sections completed. The sections looked as nice as any, but the quality of the honey was not altered in the least. The "twang" was as strong as ever, and

when a bit of the capping was cut away, the little bead-like bubbles appeared from the cells just like they did when extracting honey. This experiment leads me to believe that the nectar sours in some cases before the bees gather it.

THE PROPOSED "TRADE-MARK."

From what I have written above, it will be seen that all the honey produced by the members of the Bee-Keepers' Union will never be of the same quality, and this fact alone puts the matter of a "trade-mark," as pertains to the *quality* of honey, entirely out of the question. Trade-marks are procured to protect peculiar forms of packages, and thus the purity of the article is made sure to the purchaser. But no staple article of commerce, itself, is patentable by trade-mark. The Bee-Keepers' Union, by becoming a corporation under State law, might adopt certain packages for honey, and protect them by trade-mark, but unless every package and its contents was inspected by a general manager of the corporation, the doings of the corporation would smell to the heavens before a single year expired.

Honey is not a manufactured article; it is a natural product, and no trade-mark—which, in fact, has the effect of a patent—would be worth the paper it was printed on, if the department was foolish enough to grant it.

I insist that no trade-mark can be made available to bee-keepers, except to protect honey in certain packages, and the packages must be such as is not in common use at the time the trade-mark is applied for. Of course, I speak of availability, not of law. If it was practicable for such a corporation, through its board of directors, to handle all the honey produced by the stockholders of the concern, it would give the corporation a chance to protect its good name, and save itself from dissolution. But the idea of a corporation doing business through all of its members, as individuals, in the name of the corporation, is as wild and visionary as is the proposition to procure a trade-mark on a natural product like honey. In my opinion the whole scheme is no better than a rope of sand.

Christiansburg, Ky.

Indiana State Bee-Keepers' Convention.

The 11th annual Convention of the Indiana bee-keepers met in Indianapolis on Jan. 16, and was called to order at 1 p.m. by President E. H. Collins.

After roll call, President Collins delivered his annual address, from which we make the following extracts:

"Knowledge of the details of bee-keeping we all agree to be the first requisite of success. Many defects many be discovered by the individual in his own yard, but the advantage of the experiments and success of others is immense. Many small bee-keepers continue plodding along with the crude knowledge and awkward blunders of the empiricist, and complain that there is neither pleasure nor profit in bee-culture. Such parties should avail themselves of the knowledge of others, and success would attend their efforts.

"The past three or four seasons have been discouraging; much of our fruit and crops have been unsuccessful, the soil of the forest is less mellow than 50 years ago. These changes have seriously affected the flora.

"The drouth of 1888 and 1889 has so reduced the white clover that though it made a fine growth last Summer, it did not yield honey in proportion to the flattering prospects. The Fall rains came too late, and many bees are now starving. Yet those who fed last year came into June with strong colonies, and got paying returns.

"Statistics show that the number of colonies put into Winter quarters in the Fall of 1889 was 108,225; number on hand, 1890, 137,443; pounds of comb-honey, past 12 months, 936,676; pounds extracted, past 12 months, 107,714.

"The exhibit at the State Fair was the largest ever had, and I believe that, with one exception, all exhibitors were from Indiana.

"The single judge system is very popular, yet we desire a man who is well versed in bee-culture and all the modern appliances."

Mr. George C. Thompson, of Southport, next gave an object lesson with the hive, showing how to manipulate the brood-chamber, the use of the honey-board and section-case in securing comb-honey. This talk was very instructive, and was listened to attentively.

"Economy in Bee-Culture" was the next essay presented by Jonas Scholl, of Lyon's Station.

If your occupation is conducted properly, with good judgment and strict economy, it will give returns which will compare favorably with other industries. We must study the best methods for saving time, labor and outlay of money. We have too many patterns of hives; we

experiment too much, and waste money as well as time. We are putting too much money in the supply dealer's pocket. We must know what we want, and when we study economy, then we will find more profit in our industries.

Mr. Robert Scott, of Moorfield, read "Some Observations and Experiences of a Switzerland County Bee-Keeper."

The following essay by Walter S. Ponder, of Indianapolis, on "Management for Comb-Honey," was next on the programme:

Many people demand comb-honey because of its appearance on the table, and again, because, in their opinion, it is the only pure honey. In managing bees for comb-honey, there is certainly vast room for improvement, and while there is still room for improvement in managing for extracted-honey, it has been reduced to a more complete science. A good queen and proper Spring management are the main factors, to be followed by a good honey flow, and a pity 'tis that we cannot control the latter.

If we could accurately predict the honey seasons, we could build up accordingly; but how can we foretell? No one knows but the man in the moon, and he refuses to be interviewed. Dr. Miller can answer the question, but his answer will be, "I don't know." Last season opened very promising, but the promise was one with a string tied to it. Then, let us build up strong, and predict a good honey season, for there is something about these predictions that kindle one's imagination into pleasant dreams.

For years I was an enthusiast on the subject of spreading the brood, but that enthusiasm has died away, and now it is my positive opinion that the bees will enlarge their brood-nest as rapidly as their abilities will permit; but it is our important duty to see that the brood-nest is surrounded by an abundance of stores.

When the brood-chamber begins to be crowded, which will come about when there are from seven to nine combs of brood, we should simply add an upper story of ten brood-combs. These conditions will come about before the honey season has fairly begun, and the brood-nest will be extended into the upper box. We shall want just as much brood as we can possibly get, up to about May 25. When we lift off the upper box, see that the queen is safe in the lower chamber; confined there by a wood-zinc honey-board, with an accurate bee-space on one side—the only honey-board that I should use in my own yard—and then return the extra box; after a lapse of a

week, we can extract without danger of throwing brood from the cells.

Colonies built upon this plan will become exceedingly strong, and we may have occasion to add an extra box of ten brood-combs. I have even been obliged to build a few of them four stories high. I have practiced this method for several years in a yard of 50 colonies, without a single natural swarm.

The best results with the extractor, are obtained after we have a good supply of combs. A full sheet of foundation will make the most beautiful comb, but is rather tender for the extractor; therefore, we must reserve as many of the tough combs from the brood-chamber as possible, and place frames of foundation in their stead, but if we are not careful the bees will make crooked combs from foundation.

We must place full sheets in the cluster, where an equal force can work on either side; one year's use for brood puts them in proper condition for the extractor.

To have combs touch the bottom-bar is certainly very desirable, and is best accomplished by trimming off the lower edge and then fitting in a strip of comb; patches of drone-comb can be replaced with worker-comb in the same manner, but these repaired combs must be given to the bees at a time when honey is coming in.

Now, if all the amateurs and experts would learn to extract at the proper time—that is, when the honey is thoroughly refined—there would be a demand for the extracted-honey that would exceed the present good demand for comb-honey.

One of our city editors asks why extracted-honey is not as good as the honey that drips from the comb in a dish; one of our druggists complains that he purchased a can of extracted-honey from a farmer, and it soured. It is difficult for a beginner to know just when the proper time is to extract, because the seasons vary. At times it is sufficiently ripe without capping, and again it is unsafe to extract before it is thoroughly capped. My test in this matter has been that in shaking the bees from the combs, if I could shake any honey from the comb in the form of a spray, I would return that comb to the hive at once.

With a new extractor, good, movable frame hives, straight combs, queen-excluding honey-boards, a solar wax-extractor for an uncapping can, Italian bees, and a complete outfit of handy implements, it is not surprising that the amateur wants to turn that extractor.

Still, there are many that will not take hold of the implements that have reduced bee-keeping to a science; they will not read our excellent bee-periodicals, but still cling to the box-hives and hybrids, and in turn the hybrids cling to them.

"How far can the 'let alone' theory be successfully adapted in bee-keeping," was the title of an essay read before the Society, by R. S. Russell, of Zionsville. "All bees need care and management. Two-thirds of the mortality and bad luck in recent years, are traced to the door of the 'tinkerer,' or farmer, or the careless man. In regard to the wintering of bees, for Canada and the Northern States, small hives and cellars are safest; in our own States, large hives, well packed, are sufficient; while in Southern States, the 'let alone' theory is well enough."

Mr. Russell spoke at length in regard to the "let alone" theory, which was detrimental in nearly every case. "Success in bee-culture means that you must take care of them."

Election of officers resulted as follows: President, E. H. Collins, of Carmel; Vice-President, J. M. Hicks, of Indianapolis; Secretary, George C. Thompson, of Southport; Treasurer, Walter S. Pouder, of Indianapolis.

The following resolution was adopted:

Resolved, That the Indiana bee-keepers in session, indorse the principles of the bill to be presented to the present Legislature, now in session, entitled "An act to promote agriculture, manufactures, science and art in the State of Indiana, giving the different industrial associations a right to elect one member each."—*Indiana Farmer*.

Excluders for Comb and Extracted-Honey

JOHN H. MARTIN.

Perforated metal (zinc), as we now use it, was given to the public by the French previous to 1875, but did not attract much attention from bee-keepers until after 1881.

D. A. Jones first brought it to the attention of bee-keepers by using it as an entrance-guard and a queen-excluding division-board.

From its first introduction until the present time, its use has been gradually extending, until it has become an indispensable adjunct to the bee-hive.

There was not much advantage gained in using it for a honey-board, by simply laying a sheet of this metal between the

upper and lower stories of a hive, but the invention of the slatted honey-board, with bee-space, permitted its use to great advantage. And this slatted honey-board, from its greater stiffness, and the insertion of strips of queen-excluding metal in the open spaces, seems to be the most satisfactory method of application.

I have always considered the ordinary honey-board, of whatever make, an obstacle to the immediate entrance of the bees into the supers, and have discarded them, placing the supers as near the brood-frames as possible.

My plan for working with the new queen-excluding honey-board, in the production of extracted-honey, is as follows:

In the first place, the hive has much to do with the proper manipulation of this honey-board, and to get the greatest amount of good from it with the least expenditure of time and vexation, I have adopted the new Heddon hive—divisible brood-chamber, thumb-screws and all.

In the Spring a colony should occupy two of these shallow cases, and if they do not, I put them upon one, and work them up into two as soon as possible.

Until the middle of June, or until white clover is in full bloom, I work to obtain brood, and not only have the two lower cases full, but much in the third.

When I wish the storing of honey to commence, I remove the upper cases, put on the queen-excluders and the extracting supers, and get solid combs of honey. From actual experience I know that the bees will store at least one-quarter more honey than where the queen has free access to all the cases.

If I have reduced the queen to only one case, I enlarge the brood-chamber by inserting another case below the queen-excluder at any time, preferably, toward the close of the harvest of white honey. The queen-excluder is kept below my extracting supers until I wish to remove them. I then remove the queen-excluding board, and insert a board with a bee-escape, and the next morning walk out with my wheelbarrow and wheel in the full cases, with scarcely a bee in them; and here I wish to say that the best escape I have thus far found is the invention of E. C. Porter, of Lewistown, Ills.

The Heddon hive, the queen-excluder, and the bee-escape, enable me to conduct an out-apiary with much less labor than with old methods.

The few colonies I have managed for comb-honey are manipulated in the same

way. I reduce the brood to one case, and if there is any honey at all it goes into the supers in the most beautiful shape.

If I used an old-fashioned, out-of-date, hanging-frame hive, that necessitated the use of cumbersome and vexatious division-boards, the first thing I would do would be to split up the old things into kindling wood, and adopt something better.—*Read at the Vermont Convention.*

Apiarist's Work-Shop and Bee-Room.

E. L. PRATT.

I am building a bee work-shop, and have decided on the following plan: A plank cellar, 10x14x6, with one small light, on the south side; entrance through a bulkhead at one end. In this I shall keep all my heavy tools when not in use, and all restless nuclei, when making up during hot weather.

The building will be hip-roofed, set on posts, and, when finished, 6 feet and 6 inches. The first floor will be cut up into three rooms:

A work-shop, 8x10, containing a bench the long way of the room, a closet for foundation and other materials that should be kept out of the dust and dirt; racks and shelves enough to keep all hive parts separate and out of the way. Over the bench will be double sliding windows; at the right a large sash, and at the left a door to enter the bee-room.

In the bee-room I shall have a low and a high bench, with a double sliding sash at the right. Besides the entrance to the work-shop, there will be an outside door to the bee-room, wide enough to admit a man with a colony of bees.

The honey-room will be connected with the bee-room, and arranged as conveniently as possible for extracting, etc., with plenty of shelf and bench room. I have not designed this room as a storage room for honey.

The loft will be used for a catch-all. There will be one window in the gable-end.

The yellow Carniolans have become our favorite bees, because of their many good points. There are as many good points in this strain of bees as are generally found in two ordinary races. They are a long stride toward perfection.

They have the true traits of the Carniolan race, and are as yellow as gold. Besides being exceedingly gentle, they are great honey-gatherers. They winter

well, and there is no doubt about their coming out well in the Spring.

As far as we have tested them, there can be no fault found. As "Rambler" said when he saw them: "They are remarkably quiet while being handled."

The queens are large and very heavy layers. We have not been troubled with over-swarming.

Beverly, Mass.

Trade-Mark—Illinois Convention.

JAMES HEDDON.

SINCE reading, in the AMERICAN BEE JOURNAL, the opinions of others, *pro* and *con*, regarding the advisability of securing from the Government a trade-mark for bee-keepers, I will come forward again, with your consent, Mr. Editor, with more thoughts upon the subject.

I notice in your issue of Feb. 12, something from Mr. Latham, also from Mr. John Burr, both of whom favor the trade-mark idea, and I am, also, not forgetful of a well-written article by some brother, one or two issues previously, who has as earnestly written upon the other side of the question.

Now, as I was the deviser and proposer of the scheme in the first place, and not at all certain at the time that it was the wisest or best course to pursue to accomplish the desired end—the thought coming to me in a moment while listening to the discussions at our Detroit Convention—I desire to again make the point, which seems not to be yet fully understood, viz., that the trade-mark scheme is of no use unless we start out for a "long haul," to use the terms of freighters. A catchy trade-mark—one which, I think, was well devised and described by a friend in a recent issue of the BEE JOURNAL—would soon become noticeable all over this country.

Following its appearance, undoubtedly, would be articles in nearly all the local and general newspapers. Ready-print houses, and stereotype plate concerns, would at once take it up, and very soon the whole people would be educated as to the meaning of the trade-mark.

A trade-mark of that kind, might consist, in part, of an explanation of it under the figure, so we may rest assured it would be understood everywhere.

As I said in a former letter, some one individual might take \$40 of the funds of the Union, procure the trade-mark for 30 years, and then transfer individual rights, gratis, to all members of the Union—not only those now belonging,

but to each person as fast as they join, and to continue in their possession as long as they remain members of the Union in good standing. To those who would not join the Union, it might be sold for a small price, to help pay expenses. It is not only a fact that "in union there is strength," but it will be seen that in this union, as in all that have gone before, there is economy.

The more I have heard on both sides, and the more I think of the project, the more I believe it will slowly and surely defend us against adulteration, which, I believe, is the object sought. I am firmly impressed with the belief that any arrests or suits, under State laws, against adulteration, will end in stirring up a smudge that will do us great harm. It will result in nothing but a false education of the people, with regard to the purity and worth of our special article of production.

If, after fully discussing it, the trade-mark problem shall be abandoned, I can conceive of nothing better than to keep still; and I have thought about the subject considerable.

I would like to say a few words concerning one feature which, I believe, will account in part for the surprising lethargy shown by some of the brothers in not joining the Union.

The point is directly referred to by Mr. John Burr, on page 229, and I hope, Mr. Editor, that, as Manager of the Union, you will act upon the same. Mr. Burr wants to know how the Manager is to find out whether or not litigation was winking one eye at the applicant at the time he applied for membership. That seems to me to be very easy. Every member who solicits aid from the Union in defense of his right, should send a sworn statement in regard to all his troubles, including just how and when they began. If that sworn statement gives the date of the beginning of the trouble prior to the date of his application, one of the rigid by-laws of the Union should make it illegal for the General Manager to give the Union's assistance.

If the Manager has any suspicion regarding the truth of the sworn statement, he should, at the expense of the Union, have a local attorney investigate it and report, when, if his suspicion proves to have been well founded, he should take the Union's money, in the interest of morality, and prosecute the perjurer.

Let us do business upon business principles. I consider this one of the vital points in the matter of securing mem-

ers for the Union. I may be mistaken, but at least I hope may not be misunderstood.

THE ILLINOIS CONVENTION.

I have been much interested in the discussions in the BEE JOURNAL, with regard to the best location for holding the proposed State Convention of Illinois bee-keepers. As your broad State contains so many advanced apiarists who are deeply interested in the cause for which you meet, it seems to me that you should take all points into careful consideration.

Dr. Mason, of Ohio, is our Treasurer; not because he is noted as being honest enough to faithfully guard a large sum of money (say, from \$4 to \$8), but because we have come to look upon him as one of us, and so far nothing has ever occurred which made him a less worthy member because he lived in Ohio.

Now, there are a lot of us living in the suburbs of Chicago, as it were—down here in Michigan and Indiana, as well as a lot more in Wisconsin and Minnesota—who would like to meet with you, and we live in the same relation to Chicago that about half of the State of Illinois does. All this country may be compared to a funnel; Chicago being the point of discharge. No matter about the distance; everything readily seeks the center.

Nearly every bee-keeper has some business that calls him one-half, two-thirds, or the whole of the way to this great metropolis, and there is no question in my mind in regard to the representation of Illinois bee-keepers alone, to say nothing of outsiders, if the meeting is held in the city of the coming World's Fair. Do you not think that is true, Mr. Editor? If you have expressed yourself, I have not seen it yet.

Dowagiac, Mich.

New York State Bee-Keepers' Convention

GEO. H. KNICKERBOCKER.

MORNING SESSION—JAN. 23, 1891.

President Elwood called the Convention to order, and then announced the following committees:

Columbian Fair—I. L. Scofield, O. L. Hershiser.

State Fair—I. L. Scofield, O. L. Hershiser, G. H. Knickerbocker.

Question Box—E. R. Root, W. L. Coggs, G. H. Ashby.

Exhibits—Thos. Pierce, N. D. West, Chas. Stewart.

N. D. West then read an essay on Shallow vs. Deep Brood-Chambers, Narrow Spacing and Fixed Distances.

P. H. Elwood—I was very much interested in Mr. West's remarks, that if they do not build up as readily in the Spring, of what use are they?

I. L. Scofield—Where bee-keepers use $\frac{3}{4}$ -inch space, there will be burr combs, and a honey-board is necessary, but if only $\frac{1}{4}$ -inch (scant) space is used, there will be only a very few burr combs, and no need for honey-boards.

D. H. Coggs—I started with the Kidder hive, but afterwards made some Langstroth hives. The bees in the Langstroth hives came through the Winter in better condition, and built up much faster in the Spring; they produced more comb-honey, and were also better when I came to tier up for extracting.

I. L. Scofield—I have never used a larger frame than the Langstroth. My bees winter well, and I get as good yields of honey as my neighbors. Have never felt the need of a larger frame.

P. H. Elwood—We are using a large and quite deep frame, but not as deep as Mr. Hoffman, and some others, use. I have observed that bees do not winter as well in shallow frames. If I could get them to winter well, I should prefer them.

W. L. Coggs—Experience has taught me that if you have a deep frame, you will have more honey above the bees, they will breed up better, and you will have a stronger colony. The key to it all is, there is not as much honey in the small frame.

P. H. Elwood—Many bee-keepers err in having the bees too short of honey in the Spring. They will not build up fast unless you have plenty of early forage.

O. L. Hershiser—Chaff hives are generally damp, and they do not dry out very readily. I have noticed that they winter better where they stand in the shade. I prefer hives with a dead air-space, or made as nearly so as possible.

B. E. Foster—I have kept bees 15 years, and prefer a shallow frame (Langstroth size). The only drawback with them is, that they do not hold enough honey, so that the bees will build up rapidly in the Spring.

G. H. Ashby—Why winter out-of-doors at all, when you can build a good bee-cellar for what it would cost to get outside cases? The bees will not consume more than half as much honey, when wintered in the cellar, and this

saving of stores, also, will soon pay for the cost of the cellar.

P. H. Elwood—About 30 years ago Capt. Hetherington made 500 hives, with what is called a dead air-space, but they did not prove satisfactory, and he soon discarded them.

The Secretary then read an essay from Dr. G. L. Tinker, entitled, *Are We Ready to Adopt a Standard for the American Italian Bee?*

W. E. Clark—It seems to me as if a standard would be of but little value to any except queen-breeders, and those who exhibit bees at fairs. The standard bees with me are those that give me the most honey.

O. L. Hershisier—I think there is great need for a standard, not only on the Italian bees, but on all the various races. At the Detroit Fair, last Fall, some were ruled out because they had more than three yellow bands, and it gave some dissatisfaction. If there was a standard established, we would have something to guide us, the same as the breeders of other stock have.

R. Bacon—I have had queens from many prominent queen-breeders, and have never, as yet, received any that produced more honey than my black and hybrid bees.

G. H. Knickerbocker—I think the point that friend E. R. Root made in *Gleanings*, some time ago, in regard to there being some Cyprian blood in the four and five-banded Italians, was well taken. The first bees of this strain that I had, originated in my yard, in 1886. I had, at that time, a colony of Cyprians, with the best imported queen that I ever saw. I controlled the drones with one of Alley's traps, but occasionally, when opening the hive, a few would escape. I feel very confident that this queen mated with one of these Cyprian drones, and the result was four and five-banded workers, and drones nearly all yellow. Since that time, I have had queens from at least two breeders, claiming to have the yellowest stock extant, and, with the exception of being a little more uniform in their markings, I could see but little, if any, difference. All have the glossy, transparent yellow on the underside of the abdomen, nearly the same as the Cyprians; they always cap their honey with the same water-soaked appearance, and do not enter sections as readily as the darker strains of Italians.

The Convention adjourned until 2 p.m.

AFTERNOON SESSION.

Convention called to order at 2 p.m.

The election of officers for the ensuing year resulted as follows: P. H. Elwood,

President; I. L. Scofield, Vice-President; G. H. Knickerbocker, Secretary; Thos. Pierce, Treasurer.

President Elwood then delivered his annual address, from which the following is an extract:

"An investigation into the causes that promote the secretion of honey in flowers, I believe, would be not only interesting, but also profitable to us.

"It is commonly believed that when a bee-keeper sows and produces flowers, he has gone as far as he can in providing forage for his bees. I believe this to be a mistaken idea. When the subject is fully understood, I think he will go a step further, and seek to promote the secretion of honey in the flowers. It is now admitted that the primary purpose of this secretion is to allure insects to flowers, so that they may become fertilized.

"In the case of buckwheat, Mr. Quinby observed that a full crop of honey was usually followed by a good yield of grain, and conversely, that a short crop of honey was usually followed by a poor yield of grain.

"On a poor soil, or in a dry time, the plant may have sufficient vigor to furnish a fair amount of blossoms, but unless the necessary food or moisture is supplied at this time, the yield of honey and seed will be light. There will be no need of honey to secure a fertilization that cannot be matured.

"A study of this subject will convince any one that bees are highly beneficial and valuable to the fruit-grower and general farmer. A perfect fertilization is now held to be necessary to secure the greatest vigor in future generations of plants, while a fertilization not perfect is held to be a prolific cause of blasting, even after seed and fruit have formed.

"Mr. Cheshire says: 'I had 200 apples, that had dropped during a gale, gathered promiscuously, for a lecture illustration, and the cause of falling in every case but eight, was traceable to imperfect fertilization.'

"It has been suggested that the remedy for short crops is the management of a greater number of colonies with less work; or, in other words, out-apiaries are suggested. I do not believe that, for a majority of bee-keepers, the advice is good. When a small business does not pay, it is not usually advisable to extend it. Some other business, with bee-keeping, is advisable.

"The objection to this is that it is difficult to find any other occupation in which the busy time does not come when the apiarist is the busiest with his bees.

But, permit me to ask, if you establish out-apiaries, will not your busy time there conflict, or come at the same time, with your busy time at the home yard?"

Moved, by I. L. Scofield, that the address be accepted and ordered to be placed on file. Carried.

The Secretary then read an essay by Rev. W. F. Clarke, entitled, "What Constitutes a Good Bee Journal."

It was moved and seconded that we meet with the North American Bee-Keepers' Association at its next annual meeting, which is to be held in Albany.

The Committee on Questions then reported the following:

"Do fixed distances hinder rapid manipulation?" No.

"Does it pay to stimulate for brood-rearing by early feeding, and how is it best to feed?" Yes; if short of stores. Feed full combs of sealed honey.

"Do you believe in encouraging your neighbors to engage in honey production?" One replied, "I have, to my sorrow;" two say, "Yes, and no."

"How can I get the mice out of my bee-cellar?" Use strychnine.

"What kind of help do you employ; that is, skilled or unskilled, and why?" Skilled; it is cheaper in the end.

"What are the usual wages paid for experienced help in the apiary?" One-third more than for inexperienced.

"Do you make any of your own fixtures? Why?" Yes; it is cheaper.

"What is the best way of getting bees to work in section-boxes as soon as possible?" They will work in sections as soon as there are enough bees, and honey in the fields.

"What is the best method to prevent increase?" Give plenty of room and ventilation at the proper time.

"How much more extracted than comb-honey can be produced in an apiary?" Two say 25 per cent.; one says, 40 per cent.

N. D. West was then requested to give a description of his coiled-wire queen-cell protector.

Adjourned until 7:30 p.m.

EVENING SESSION.

The Convention was called to order at 7:30 p.m., with Vice-President I. L. Scofield in the chair.

The first essay was from F. B. Thurber, entitled, "The Influence of Free Sugar on the Consumption of Honey." It was read by Mr. C. H. Killmer, who represented the firm of Thurber, Whyland & Co. A vote of thanks was then extended to

Mr. Thurber for his valuable essay, and it was ordered to be placed on file.

[Mr. Thurber's essay will be found on page 216, under the head of "Sugar, Honey, and the Tariff."—Ed.]

Then followed an essay from Mr. Henry Segelken, of the firm of Hildreth Bros. & Segelken, entitled, "What Our Market Demands," from which the following is an extract:

It is certainly to the interest of the producer to put his product on the market in the most attractive and salable style, and we, as sellers and distributors, are in a position to know the wants of our markets. Receiving comb-honey in large quantities from all the honey-producing centers, we get it in all shapes; and in many cases there is room for vast improvement.

In these days of sharp competition in all industries, it has been found necessary to put the goods on the market in an attractive shape. This is mainly the case with all kinds of food products, such as canned goods, preserves, etc., all of which are handsomely labeled, and those which are put up the neatest will find quickest sale. The consumer will always buy that which looks the most appetizing. As these facts cannot be denied of staple goods, it is all the more necessary to use the utmost care in putting up comb-honey in the most attractive style, because this is regarded a luxury—if not altogether, certainly to a very great extent.

We give credit to a large number of shippers, who are up to the times, and put their honey up in first-class shape. Their goods always find ready sale at the highest market prices; if they do not sell their product outright, they are sure of receiving returns within a short time, and need not fear having their honey carried for months, or carried over the entire season.

We very often receive comb-honey put up in bulky, awkward crates, not even glass on the sides of the crates; the combs built without separators, so that it is almost impossible to take them from the crate without injury. Such goods find very slow sale, and prices have to be shaded considerably to move them off. Still, these shippers generally expect highest prices, and are often dissatisfied and disappointed with the returns, when the fault lies with themselves only.

For a one-pound section we recommend a single-tier crate, holding 24 or 25 sections. While we are not opposed to the double-tier crate, we believe the former is most desirable—at any rate for

unglassed honey. If some of the combs in an upper tier leak, they will drip over the bottom rows, and soil the whole crate.

For glassed or unglassed honey, we advise the use of heavy paper in the bottom of the crate, turned up about half an inch on the sides. If some of the combs should be broken down, this will prevent the honey from leaking through the crates. In addition, it is advisable to lay strips of wood of about $\frac{1}{4}$ inch in thickness on the paper, from side to side, for the combs to rest on. This will prevent the honey dripping from the broken combs from soiling the good combs. Of course, it is not necessary to go to this trouble when the honey is shipped in paper boxes.

"What part of the honey should be sent to market in paper boxes, glassed or unglassed?" Up to last year we have said, about one-third of each kind, as the demand was about equally divided. We now use 50 per cent. glassed, 30 per cent. paper boxes, and 20 per cent. unglassed, as near as we are able to estimate.

The reasons why glassed honey has the preference seem to be these: The retailer can take every comb from the crate and make a handsome display of it (this, of course, can be done with the paper boxes, but the glass will show the quality of every comb); the dust cannot settle on the honey; and the glass will prevent inquisitive and curious customers from sticking their fingers in the comb.

Another item of great importance, is to have the sections weigh not over one pound each, and less if possible. Our market demands light weights at all times, be the honey glassed, unglassed, or in paper boxes. Heavy sections are generally rejected, and we find it slow work moving them off.

We would call your special attention to the *grading* of the honey, which is as important a question as any of the former, and in which too much care cannot be taken. Very often we receive honey which is not properly graded, and where off-grades are mixed in with the first-grade, and marked No. 1 white honey. The outside combs will appear all right, but inside of the crate will be the poorer grade. We cannot take the trouble to open and examine every crate and comb, but have to rely on the shipper, and go by the mark and the appearance of the crate. We sell and ship the honey, and the first thing we know, the party who bought it will complain about the quality, and hold the honey subject

to our order, and we must either have the honey shipped back to us, or make an allowance satisfactory to the buyer. This is certainly not very pleasant; it hurts our reputation, and we are apt to lose that customer. Not alone this, but the shipper is also dissatisfied, as generally he expects the highest market prices, and often will not admit that the honey was not properly graded, while no one but himself is to blame. All this can be avoided if the honey is properly graded.

Two grades of white honey are sufficient for our markets. For "fancy white," select only what is fancy white. For second grade, or "fair white," take combs that are stained, or a trifle off in color, and combs scantily filled around the edges. Any combs mixed with dark or buckwheat honey should not be put in with the second grade. Such honey cannot be sold for white honey, and will not sell for more than buckwheat. In fact, a straight buckwheat finds better sale than mixed honey. This should be crated by itself and marked "mixed" or "dark" honey.

Our market demands a limited quantity of two-pound sections. About 10 per cent. of the honey we receive is in two-pound sections, which is sufficient to supply the demand. They should be glassed altogether, and put in crates holding 12 or 15 sections.

The shipping of comb-honey should be by freight altogether. Some bee-keepers still seem to think that it must be sent by express only, believing it to carry safer. This is entirely wrong. Honey is carried just as safe, if not safer, by freight—at least, this has been our experience. Owing to the short crop last season, we received a large number of small shipments, ranging from 10 to 50 crates each, by freight, and we had but two or three lots which arrived somewhat broken down, and in one case the shipper wrote us afterwards that the honey had already leaked when he took it to the depot.

We re-ship in all-sized lots, often in single crates, and very seldom have a complaint. So far as the responsibility is concerned, all carriers—railroads, steamboats, and express companies—will take comb-honey only at *owner's risk*, and will not listen to any claim if the honey has been broken down while in transit. Why, then, pay the express company three times the rate of freight lines? We would advise shippers to load the honey in the cars themselves, properly protected. If this is done they may feel sure that the honey will arrive

at its destination in good order, under ordinary circumstances.

Another point is, that honey should be shipped only in the original crates. We received one lot of honey from Central New York this season, where the shipper had crated six to eight original crates into one large crate. This, of course, was too heavy a package to be handled carefully, and, no doubt, received rather rough handling. The result was, that we received the honey all broken down, and the shipper was out 4 to 6 cents per pound on it. A sad lesson, indeed!

Last, but not least, "What is the right time to ship comb-honey to market?" We have always advised early shipping, say, during September and the first part of October. Our experience teach us that the early shippers obtain best prices, and get quickest returns, be the crop large or short. In all our experience we have never known the market to advance during November and December, but it usually declines as the season passes along.

A vote of thanks was extended to Mr. Segelken, for his able essay, and it was ordered to be placed on file.

C. H. Killmer—I heartily endorse all that Mr. Segelken has said; we are both in the same market, and the demands are the same.

I. L. Scofield said, in reply to a question, "We appreciate what Mr. Segelken has said, because he has told us what the consumers demand. We want a section that we can use with paper boxes, have glassed, or ship to market without glass."

H. Segelken—The condition of our market has changed from what it was a few years ago. The demand for glassed goods has increased during the past two years, so that we now advise that 50 per cent. of first-grade white honey be glassed. We believe that the demand for glassed goods will be permanent.

Chas. Israel—The increased demand for comb-honey glassed, is mainly on account of shipment. Consumers think it reaches them in better condition.

I. L. Scofield—Comb-honey will stand shipment better in paper boxes than in any other package. The paper acts as a cushion, and prevents the honey from breaking. For a number of years I have shipped large quantities, put up in that way, and seldom, if ever, have a comb broken if properly handled.

P. H. Elwood—We have to meet the demands of the market; but we, as bee-keepers, should be very careful about going to extremes. If we should all glass our honey next year, there would be a

glut in the market, and the price would be lowered. The wisest thing to do, is to put a certain amount in paper boxes, and ship a certain amount glassed and unglassed. For example, a couple of years ago, the New York markets demanded unglassed sections, and nearly all bee-keepers sent it to market in that shape, or in paper boxes. The result was, there was a scarcity of glassed goods, and they brought a higher price.

O. L. Hershisser—No doubt, the trade changes in regard to size, and style of package, but it does not, or has not changed in regard to weight of sections. The demand has been for light weight for a number of years.

The subject of bee-escapes was then taken up.

C. H. Dibbern, of Milan, Ills., prepared an essay on this subject, but on account of a blunder of some postal clerk, it did not arrive in time.

G. H. Ashby—I have had a little experience with bee-escapes, and as far as that goes, they are a success. My apiary is located very near the highway, and sometimes the bees were troublesome to passers-by, but since using the bee-escape, I can take off every pound of both comb and extracted-honey without any disturbance whatever.

D. H. Coggs shall—I smoke the bees, and shake out of the clamps or supers what I can get out handily, then stack them up in the bee-house, and put a small colony of bees (with a queen) on top, and by morning the bees will all be out of the sections.

Adjourned until to-morrow morning.

MORNING SESSION—JAN. 24, 1891.

The Convention was called to order at 9 a.m., by President Elwood.

The Secretary then read an essay from Samuel Cushman, of Pawtucket, R. I., on "Artificial Heat to Promote Brood-Rearing."

N. D. West—Nothing I have ever tried in the line of artificial heat, in or around the hive, to promote brood-rearing, has been of any value to me.

G. H. Ashby—I generally have no trouble to get the bees early enough, but for the last few years I have been troubled to get the honey. The flowers have secreted but little nectar, and we have had too many bees that are only consumers.

W. L. Coggs shall—I have never experimented with artificial heat, but in early Spring, when we have cold nights, I take a basket of dry sawdust and sprinkle a handful at the entrance of each hive, this helps to keep up the temperature of

the brood-nest, and the bees will open the entrance the next day as soon as it gets warm enough for them to fly.

The Secretary then read an essay by F. H. Cyrenius, on "New Uses of Queen-Excluding Zinc Boards."

N. D. West—We only have use for queen-excluding boards about ten days.

B. E. Foster—I have produced comb-honey for 15 years, and never have had occasion to use queen-excluders.

Wesley Dibble—We need queen-excluders when using a shallow frame.

G. H. Knickerbocker—I have boxed 25 colonies over shallow frames (half depth, closed-end Quinby) for the past two years. I had on hand a number of queen-excluders, but have had no occasion to use them. I box over 12 to 14 of these shallow frames, which are equal to six or seven of standard size.

U. Harmon—I use the Heddon hive, and have used but few excluders, and have never yet found any brood in the boxes. In hiving I give the swarm the two sections of the hive.

It was thought by several members that queen-excluders were necessary where not more than eight shallow frames were used.

The Committee on Exhibits then reported as follows:

B. E. Foster, Utica, N. Y.—Wire frame-lifter. I. L. Scofield, Chenango Bridge, N. Y.—Scales for weighing colonies in the apiary. They have a broad platform, and are very good for the purpose.

M. E. Hastings, New York Mills, N. Y.—Tin pail bee-feeder; a good feeder for stimulating and feeding weak colonies.

G. H. Knickerbocker, Pine Plains, N. Y.—Queen nursery, which is very good.

C. W. Costellow, Waterborough, Me.—Cages for mailing queens; good.

F. H. Cyrenius, Oswego, N. Y.—Queen nursery and sample of Given comb-foundation; good.

Dr. G. L. Tinker, New Philadelphia, O.—Samples of his perforated metal, the workmanship of which was perfect.

W. E. Clark, Oriskany, N. Y.—Smokers, wood separators, honey-knives, one-piece sections, Quinby hive clasps, Van Deusen fasteners.

N. D. West, Middleburgh, N. Y.—Wire queen-cell protector, queen cages, bee-escape, and brood-frame with fixed distances.

Henry Segelken, New York City.—Samples comb-honey, in paper boxes and glass sections.

J. Van Deusen & Son, Sprout Brook, N. Y.—Fine samples of flat-bottomed comb-foundation.

H. R. Wright, Albany, N. Y.—Honey kegs, crate of honey in glass pails; crate of honey in tin pails; and a crate of comb-honey.

Charles McCulloch, Albany, N. Y.—Two pictures, one representing a house built of honey, as exhibited by him at the New York State Fair in 1889, the other showing his exhibit at the New York and New England Fair, in 1890.

E. W. Philo, Half Moon, N. Y.—Machine for putting together and automatically gluing the one and four-piece sections.

O. L. Hershiser, Buffalo, N. Y.—Samples of very fine extracted-honey, in bottles and glass pails.

THOMAS PIERCE,
N. D. WEST,
CHAS. STEWART,
Committee.

After a short discussion of miscellaneous matters, the Convention adjourned for an informal meeting of the members before departing for their homes.

Hamilton County, Indiana, Convention.

E. H. COLLINS.

The Hamilton County bee-keepers met at Westfield, on Feb. 7. It was a dreary, nasty day, and we willingly accepted an invitation to take our lunch at Dr. Herr's and add a cup of hot coffee.

Mr. Frank Stonica, a student from Cincinnati, gave us some music, and with the music, warm dinner, hot coffee and a jolly crowd, the day passed very pleasantly.

A review of the lessons learned at the State Society was given by Mr. Cox, and others who attended that meeting.

It was held that the great cause of a light honey crop last year was weak colonies, caused by light stores from the previous dry Fall.

Various methods of feeding were carefully explained, and Hamilton county will have a better honey harvest next season, on account of the very interesting discussion.

Do not meddle with bees unnecessarily in the Winter. The vitality of thousands of them is low, and if disturbed, they die before the season is warm enough for young bees to take their place. No queen can be given at this time of the year.

If they are short of stores, you can place wax over the frames, or insert a comb of honey, but do not break the cluster; let them alone as much as possible until warm weather. Bees are reported in good condition.

The death of Dr. Brown, a member from Sheridan, was reported. The Doctor had several colonies of bees.

Only a fraction of the discussion is here reported.—*Indiana Farmer*.

If you have a desire to know how to have Queens fertilized in upper stories, while the old Queen is still laying below—how you may *safely introduce* any Queen, at any time of the year when bees can fly—all about the different races of bees—all about shipping Queens, queen-cages, candy for queen-cages, etc.—all about forming nuclei, multiplying or uniting bees, or weak colonies, etc.; or, in fact, everything about the queen-business which you may want to know, send for "Doolittle's Scientific Queen-Rearing," a book of 170 pages, which is nicely bound in cloth, and is as interesting as a story. Price, bound in cloth, \$1.00. For sale at this office.

CONVENTION DIRECTORY.*Time and place of meeting.*

1891.
 March 25, 26.—S. W. Wisconsin, at Lancaster, Wis.
 Benjamin E. Rice, Sec., Boscobel, Wis.
 March 10, 11.—Huron, Tuscola and Sanilac Counties,
 at Caro, Mich.
 Jno. G. Kunding, Sec., Kilmanagh, Mich.
 April 1, 2.—Texas State, at Greenville, Texas.
 J. N. Hunter, Sec.
 May 6.—Bee-Keepers' Ass'n. and Fair, at Ionia, Mich.
 Open to all. Harmon Smith, Sec., Ionia, Mich.
 May 7.—Susquehanna County, at Montrose, Pa.
 H. M. Seeley, Sec., Harford, Pa.

[3] In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.

North American Bee-Keepers' Association

PRESIDENT—P. H. Elwood....Starkville, N. Y.
 SECRETARY—C. P. Dadant.....Hamilton, Ills.

National Bee-Keepers' Union.

PRESIDENT—James Heddon...Dowagiac, Mich.
 SEC'Y AND MANAGER—T. G. Newman, Chicago.

Bee and Honey Gossip.**Dampening Sections.**

On page 265 Mr. E. C. Eaglesfield gives his method of dampening sections, before bending, and asks if any one has a better way. I think I have. It is as follows: Lay a bale of 500 sections on the floor, and remove the cleats covering the grooves. Now take a teapot filled with hot water, and pour a small stream of water into each groove, then turn them over, and repeat the operation. By this method I can dampen 500 sections in 2 or 3 minutes. S. F. TREGO.

Swedona, Ills., Feb. 20, 1891.

Life-Members of the Union.

Could not more bee-keepers be induced to join the Union if it and the American Bee-Keepers' Association were consolidated? It seems to me to be a good plan, and one that that will prove advantageous. A life-membership fee of \$10 would entitle them to more benefits, and at the same time more would be enabled to join. But this is merely a suggestion. J. W. TEFFT.

Buffalo, N. Y.

[We leave that to the members to decide.—Ed.]

Not a Shadow of a Prospect.

Except that we are having sufficient rains to soak the ground thoroughly, so that white clover has a chance to grow from the seed, there will not be a shadow of a prospect for a white clover honey crop in this part of Iowa (Keokuk and surrounding counties) the coming season, as the great drouth of last Summer killed all the white clover on the upland meadows, and even the bottom lands make a very poor showing. Bees went into winter quarters here with very light stores, and swarms which had to build their comb, had no winter stores at all, and, as a result, are dying by wholesale. In this section of the country a bee-keeper has no chance to sell a colony of bees for a fair price, as farmers who secured a start of a little apiary by catching a runaway swarm, are selling prime swarms for 75 cents to \$1 each. Of course, none of those fellows read a bee-periodical, and you cannot induce them to subscribe for one, but if you talk "bees," they know all about them, and more too. P. F. AHRENS.

Sigourney, Iowa, Feb. 20, 1891.

Salt for Bees.

A correspondent of the BEE JOURNAL writes that his bees are uneasy, and he thinks there are mice in the hive. In my opinion, the trouble is that he has not properly ventilated the hives. My bees are as quiet as kittens. I open both back and front entrance, and raise the top board about $\frac{1}{4}$ of an inch. Once a week, I look into the bottom of each hive, and, with a bent wire, remove all dead bees. About two weeks ago I found that 2 colonies were dying, and when the dead were removed, they emitted a foul odor. I mixed some salt in a pint of clear water, and threw some of the water into the bottom of the hive, and the bees came down on the bottom-board, and drank the salt water, like so many cows would have done. Since then, I have given them a little of the salt water every few days, and but few dead bees are to be found now. We always give salt to our horses and cattle, and perhaps a little salt would be good for the bees. I am not in favor of wintering bees out-of-doors in this climate, when our cellars are almost invariably dry at that season. My house is 26x36 feet, and rests on a stone foundation 26 inches above the ground; my cellar is 12x16, and 7 feet deep, and the average temperature is about 38°. If the cellar is too warm, give the bees more ventilation in the hives. When

the bees are uneasy, there is something wrong—as a general thing they are too warm. I think the belief is general among bee-keepers, that when the bees are snugly stowed away in the cellar, that it is not best to disturb them, as a great many think they eat more if you disturb them. This may be so, but there are thousands of colonies of bees that suffocate and die in the cellar, and out-of-doors, during the Winter, that would be all right if properly attended to. Bees require care and attention, as well as cattle and horses.

MARK D. JUDKINS.
Osakis, Minn., Feb. 16, 1891.

Trade-Mark Injurious.

I think the trade-mark would be very injurious to all the bee-keepers in the United States. A label with the name and address of the bee-keeper on, is the best trade-mark you can find.

B. E. BROWN.
Prairie du Chien, Wis., Feb. 22, 1891.

[You are right about the trade-mark. It would be the most disastrous thing to the Union that could occur. The projectors of that idea did not think enough about it before suggesting the matter to the Convention. It would, in our opinion, be not only death to the Union, but it would serve a "death blow" to the pursuit as well. The unscrupulous, the dishonest, the adulterators, and the abominable nuisances who sophisticate in every community, would buy or steal it, and use it to the detriment of the pursuit.—Ed.]

Hopes for a Big Honey Crop.

In the Spring of 1890, I had 40 strong colonies of hybrid bees, but like many of my fellow bee-keepers, I ran a non-swarmling, and as the sequel shows, a no-honey apiary, as my surplus only amounted to 250 pounds. My bees went into winter quarters in splendid shape, all in chaff hives, of my own contrivance. I always winter my bees on the summer stands, and have not suffered any loss for two years. Bees were flying nicely on Feb. 14 and 15. I am making arrangements for a good season, and hope for a big honey crop in 1891.

F. N. JOHNSON.
Knoxville, Ills., Feb. 16, 1891.

Bee-Keeping Under Difficulties.

Not long since a gentleman living in Coryell county, this State, suffered the loss of his house by fire, which was supposed to have been caused by an incendiary. A few days later, several colonies of bees were stolen from him, and excitement ran high in the neighborhood. Search was immediately instituted, and the hives were located near the dwelling of a man named Franklin. A number of the hives had been given a coat of paint, which had not yet dried when they were discovered. On searching Franklin's house, honey was found. Warrants being sworn out, Franklin and his son were arraigned before a Justice of the Peace, when they waived examination, and were placed under bonds of \$500 each, to await the action of the Grand Jury. The accused bear a good reputation, but the evidence against them is very strong.

R. HOUSTON HENDERSON.
Killeen, Texas.

Hope for a Better Season.

Bees have wintered well so far; and although the weather has been cold enough to confine them to the hives most of the time, it has not been cold enough to injure bees any, the mercury not having reached zero, at any time. We hope the coming season may prove a better one for honey than the season of 1890.

JOSEPH E. SHAVER.
Friedens, Va., Feb. 23, 1891.

Bees, Not Honey.

The BEE JOURNAL comes all right, and I like to read it so well that I can scarcely wait for its arrival. I have never kept bees on a large scale, but have handled a few colonies each year, for several years. At present I have 11 colonies. At the close of last season I had 12, but one weak colony died. The rest are doing well, with plenty of honey in each hive. My queens have been laying for more than four weeks, and my colonies are largely increased by young bees. I keep them in the Simplicity hive, and wish to increase to 100 colonies this season, if possible. I know that if I make the increase, I will not get any surplus honey, but my object is bees, and not honey this season. My bees are hybrids, and are good ones, and I wish to keep them such. I wish, however, to use one tested Italian queen from which to furnish queens for all of my new colonies. Will some experienced

bee-keeper tell me, through the BEE JOURNAL, the best method by which I can increase my 11 colonies to 100, and furnish them all with queens from one tested Italian queen?

N. A. ELLETT.

Augusta, Ky., Feb. 20, 1891.

Three Colonies in One Tree.

On page 764 of the BEE JOURNAL for 1890, is a letter from C. R. Smith, of Moorfield, Ind., relating the finding, by two boys, of a tree containing 2 colonies of bees. Two of our neighbors each found trees containing 2 colonies, and my papa has a tree with *three* colonies. My papa purchased a colony of bees for my birthday present, and it is my intention to become a bee-keeper. As soon as possible, I intend to subscribe for the BEE JOURNAL. I am 11 years old, a regular attendant at school.

MATTIE ROBY.

Chanute, Kan., Feb. 23, 1891.

Lost Through Neglect.

I cannot give a flattering account of my bees for the past year. For a few days, while the orchard was in bloom, the bees were working industriously, and breeding was going on rapidly; then came a change to cold, rain weather, and the bees were confined to their hives until almost starved. I was compelled to feed several of my colonies to save them, and my best colony was lost through neglect. The fact that a hive is overflowing with bees is not conclusive evidence that they are amply provided with stores, and when the brood are being thrown out in large numbers, it is best to make a thorough examination, and, if not too late, give the bees some warm sugar syrup through a good bee-feeder.

WILLIAM ROBSON.

Rolla, Mo.

Bending Sections.

Mr. Eaglesfield wishes to know (page 265) if any one has a better way to dampen sections than his own. I think there is a better, or, at least, much quicker, way to do it. Take a teapot filled with water, and pour the water through the grooves before the sections are taken out of the crate. Within two minutes you can have 1,000 sections ready to bend. But, why dampen at all? Keep your sections in an underground room, or place them in the cellar for a few days, and you will have little

trouble from broken sections. I seldom break more than one in 500. No machine is necessary for bending sections. Two skillful hands, with ten nimble fingers, can put them up at the rate of 1,000 per hour, as I have often done, and putting them up any faster is needless; especially when one's whole crop seldom requires ten thousand.

F. GREINER.

Naples, N. Y., Feb. 25, 1891.

Painting Hives on the Inside.

I believe it is generally admitted that a colony of bees in a hive with damp walls is not in condition for successful wintering. If hives had one or two coats of paint on the inside, as well as on the outside, would not this difficulty be avoided? When the moisture came in contact with the walls, instead of penetrating them, as in the unpainted hives, it would run down and out of the hive, leaving the walls dry. Have any of the readers of the BEE JOURNAL had any experience in this direction? If so, I would be pleased to hear the result, and also to have the opinion of others as to the advisability of such a plan.

A. J. FISHER.

East Liverpool, O., Feb. 21, 1891.

CLUBBING LIST.

	Price of both.	Club.
The American Bee Journal.....	\$1 00....	
and Gleanings in Bee-Culture.....	2 00....	1 75
Bee-Keepers' Guide.....	1 50....	1 40
Bee-Keepers' Review.....	2 00....	1 75
The Apiculturist.....	1 75....	1 65
Canadian Bee Journal.....	1 75....	1 65
American Bee-Keeper.....	1 50....	1 40
The 7 above-named papers.....	6 00....	5 00
and Langstroth Revised (Dadant).....	3 00....	2 75
Cook's Manual (1887 edition).....	2 25....	2 00
Quinby's New Bee-Keeping.....	2 50....	2 25
Doolittle on Queen-Rearing.....	2 00....	1 75
Bees and Honey (Newman).....	2 00....	1 75
Binder for Am. Bee Journal.....	1 60....	1 50
Dzierzon's Bee-Book (cloth).....	3 00....	2 00
Root's A B C of Bee-Culture.....	2 25....	2 10
Farmer's Account Book.....	4 00....	2 20
Western World Guide.....	1 50....	1 30
Heddon's book, "Success,".....	1 50....	1 40
A Year Among the Bees.....	1 50....	1 35
Convention Hand-Book.....	1 50....	1 30
Weekly Inter-Ocean.....	2 00....	1 75
Toronto Globe (weekly).....	2 00....	1 70
History of National Society.....	1 50....	1 25
American Poultry Journal.....	2 25....	1 50
The Lever (Temperance).....	2 00....	1 75
Orange Judd Farmer.....	2 00....	1 65
Farm, Field and Stockman.....	2 00....	1 65
Prairie Farmer.....	2 00....	1 65
Illustrated Home Journal.....	1 50....	1 35
American Garden.....	2 50....	2 00
Rural New Yorker.....	2 50....	2 00
Nebraska Bee-Keeper.....	1 50....	1 35

Do not send to us for sample copies of any other papers. Send for such to the publishers of the papers you want.

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ALFRED H. NEWMAN,
BUSINESS MANAGER.**Special Notices.**

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Send us *one new* subscription, with \$1.00, and we will present you with a nice Pocket Dictionary.

The date on the wrapper-label of this paper indicates the end of the month to which you have paid. If that is past, please send us a dollar to pay for another year.

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For 50 colonies (120 pages)	\$1 00
" 100 colonies (220 pages)	1 25
" 200 colonies (420 pages)	1 50

As there is another firm of "Newman & Son" in this city, our letters sometimes get mixed. Please write *American Bee Journal* on the corner of your envelopes to save confusion and delay.**The Convention Hand-Book**

is very convenient at Bee-Conventions. It contains a simple Manual of Parliamentary Law and Rules of Order for Local Bee-Conventions; Constitution and By Laws for a Local Society; Programme for a Convention, with Subjects for Discussion. In addition to this, there are about 50 blank pages, to make notes upon, or to write out questions, as they may come to mind. They are nicely bound in cloth, and are of the right size for the pocket. We will present a copy for one new subscription to the BEE JOURNAL (with \$1.00 to pay for the same), or 2 subscribers to the HOME JOURNAL may be sent instead of one for the BEE JOURNAL.

A Word of commendation from our readers to those not among our subscribers, will be more potent than anything we can say. If you like our JOURNAL—please let your neighbor know it, and let us thank you in advance for this favor.

Subscribers whose time does not expire for some months can safely renew at any time, without fear of loss, because we always extend the time from the date of expiration on our books. If you want any other magazine or newspaper, we can furnish it, and save you money by clubbing it with the BEE JOURNAL. See our list of a few of them on page 328.

Bee-Keeping for Profit, by Dr. G. L. Tinker, is a new 50-page pamphlet, which details fully the author's new system of bee-management in producing comb and extracted-honey, and the construction of the hive best adapted to it—his "Nonpareil." The book can be had at this office for 25c.

Binders made especially for the BEE JOURNAL for 1891 are now ready for delivery, at 50 cents each, including postage. Be sure to use a Binder to keep your numbers of 1890 for reference. Binders for 1890 only cost 60 cents, and it will pay you to use them, if you do not get the volumes otherwise bound.

Only a Few complete volumes for 1890 are on hand. If any one desires to have a full set of numbers for binding, they should be sent for soon.

HONEY AND BEESWAX MARKET.

DETROIT, Feb. 28.—Comb-honey is quoted at 14@15c; demand light. Extracted, 7@8c. Beeswax in fair demand, 27@28c.

M. H. HUNT, Bell Branch, Mich.

NEW YORK, Feb. 28.—The market is bare of comb-honey. We quote: Extracted, buckwheat, 7@7½c; California, in good demand, at 6¾@7¼c, and market well supplied; Southern, none in market. Beeswax, 25@27c.

HILDRETH BROS. & SEGELKEN,
28-30 West Broadway.

KANSAS CITY, Feb. 28.—The receipts of comb-honey are very light; our market will be well cleaned up by March 15. We quote: White 1-lb. comb, at 16@18c; California white, 2-lb., 14@15c; extracted, 6@7c. Beeswax, 22@25c.

CLEMONS, MASON & CO.,
Cor. 4th and Walnut Sts.

CINCINNATI, Feb. 28.—Demand is good for all kinds of honey, with a good supply on the market of all but Southern honey, which is scarce. Choice comb honey brings 16@17c per pound. Extracted honey, 6@8c.

Beeswax is in good demand at 24@26c., for comb to choice yellow. C. F. MUTH & SON,
Corner Freeman & Central Aves.

CHICAGO, Feb. 28.—Demand at present not very active on comb honey. Fancy white, 17c; white, 16c; white, 2-lb. sections, 14c; buckwheat, 1-lb. sections, 12c; extracted, 7@8c. Beeswax, 28c.

S. T. FISH & CO., 189 S. Water St.

KANSAS CITY, Feb. 27.—Fancy white 1-lb. comb, 18c; fair to good, 17c; dark 1-lb., 14@15c; 2-lb. white comb, 15@16c; 2-lb. dark, 13@14c; extracted, white, 7c; dark, 5@6c.

HAMBLIN & BEARSS, 514 Walnut St.

CHICAGO, Feb. 28.—The volume of trade in honey is very small. A few of the best lots are taken at 17@18c; but where the condition and appearance of honey is a little off, 16c is about the top. The supply is not large, but there seems to be about enough for the trade. Extracted, is selling at 7@8c, with fair trade.

Beeswax, 27@28c.

R. A. BURNETT, 161 S. Water St.

BOSTON, Feb. 27.—Honey is in fair demand; supply short. Fancy, 1-lb. comb, 19@20c; fair to good, 18@19c; 2-lb. sections, 16@17c. Extracted, 8@9c. There is no beeswax on hand.

BLAKE & RIPLEY, 57 Chatham Street.

ALBANY, N.Y., Feb. 28.—The honey market is slow and unsatisfactory, stocks of comb-honey being light and prices unchanged; stock of extracted increasing. We are selling white at 16@18c; mixed, 14@15c; dark, 12@14c. Extracted, white, 8@9c; dark, 6@7c. Beeswax, 26@30c.

H. R. WRIGHT, 326-328 Broadway.

We Club the American Bee Journal and the Illustrated Home Journal, one year for \$1.35. Both of these and Gleanings in Bee Culture, for one year, for \$2.15.

Supply Dealers desiring to sell our book, "Bees and Honey," should write for terms before issuing their Catalogues

Clover Seed.—White Clover Seed has declined, and Alsike has advanced. The price of either seed will be 25 cents per pound; \$2.50 per peck; and \$9.00 per bushel, until further notice.

Convention Notices.

The Southwestern Wisconsin Bee-Keepers' Association, will hold its next Convention in the Court House, at Lancaster, Grant Co., Wis., March 25, 26, 1891. All who are interested in bee-culture and convention-work are cordially invited to attend. The topics for essays and discussions are enumerated on page 183.

BENJAMIN E. RICE, Sec., Boscobel, Wis.

The 13th annual session of the Texas State Bee-Keepers' Association, will be held at Greenville, Hunt Co., Texas, on April 1, 2, 1891. All interested are invited.

J. N. HUNTER, Sec.

The Huron, Tuscola and Sanilac Counties Bee-Keepers' Association, will meet in convention at Court House, at Caro, Tuscola Co., Mich., March 10, 11. All interested are cordially invited to attend, as it promises to be one of the best meetings the Association ever held.

JNO. G. KUNDINGER, Sec., Kilmanagh, Mich.
H. E. GORDON, Pres., Unionville, Mich.

The 8th semi-annual meeting of the Susquehanna County Bee-Keepers' Association will be held at Montrose, Pa., on Thursday, May 7, 1891.

H. M. SEELEY, Sec., Harford, Pa.

Wants or Exchanges.

Under this heading, Notices of 5 lines, or less, will be inserted at **10 cents per line**, for each insertion, when specially ordered into this Department. If over 5 lines, the additional lines will cost 20 cents each.

WANTED—To exchange 1-lb. thin Vandervort f'd'n for 2 of wax. Samples and testimonials free. C. W. DAYTON, Clinton, Wis.
8A10t

WANTED—To exchange Strawberry Plants for Poultry, or other leading varieties. Address, DOUGLASS BROS., Hamburg, Mich.
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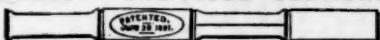
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